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CLERK
U.S. BANKRUPTCY COURT
DISTRICT OF DELAWARE**Tom L. Lewis**

Lewis & Slovak, P.C.
P. O. Box 2325
Great Falls, MT 59403
(406) 761-5595

**IN THE UNITED STATES BANKRUPTCY COURT
FOR THE DISTRICT OF DELAWARE**

In re:)	Chapter 11
W.R. GRACE & CO., et al)	Case No. 01-01139 (JKF)
)	(Jointly Administered)
Debtors.)	Claim No. 00006094
)	
)	
)	

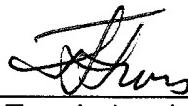
**RESPONSE TO DEBTORS' SECOND OMNIBUS
OBJECTION TO CLAIMS (NON-SUBSTANTIVE)**

On behalf of claimant, Duane Edward Lindsay (Claim No. 00006094), his attorney, Tom L. Lewis of Lewis & Slovak, P.C., objects to Debtors' Second Omnibus Objection to Claims (Non-Substantive), dated July 21, 2003, and received August 7, 2003, on the basis of improper notice and further responds as follows:

1. Claimant's claim is with respect to asbestos contamination from a Grace product in or on the property.
2. Claimant's claim is based upon the findings of the U.S. Environmental Protection Agency in its Administrative Record and supplement, test results, and other documentation, as well as information obtained from other sources, including but not limited to local and national news reports, articles and meetings.
3. Claimant consented to the production and release of supporting documentation, in the possession of the U.S. Environmental Protection Agency, to Grace and Grace's representatives at the time of submission of claim in March, 2003.
4. Claimant has attached supporting documentation, which was not available at the time the proof of claim was filed.

Respectfully submitted this 8th day of August, 2003.

Lewis & Slovak, P.C.

By: 

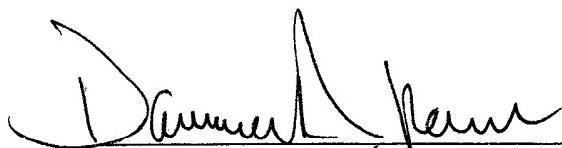
Tom L. Lewis
P.O. Box 2325
Great Falls, MT 59403
(Attorneys for Claimant)

CERTIFICATE OF SERVICE

I hereby certify that a true and legible copy of the foregoing Response to Debtors' Second Omnibus Objection to Claims (Non-Substantive) was served on the 8th day of August, 2003, by fax and by first class mail, upon the following:

James W. Kapp III, Janet S. Baer and Christian J. Lane
Kirkland & Ellis, LLP
200 East Randolph Drive
Chicago, IL 60601

Scott E. McFarland
Pachulski, Stang, Ziehl, Young, Jones & Weintraub, P.C.
919 North Market Street 16th Floor
Wilmington, DE 19801



BD- 001049

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18th STREET, SUITE 300
DENVER, CO 80202

CONSENT FOR ENTRY AND ACCESS TO PROPERTY

Address: Scott Lindsey

Phone: 293-7692

Address of Property for which consent for entry and access is being granted:

412 Parke Street

Duane & Donna
Lindsey
owners

Relationship to property: Owner
(i.e., owner, tenant, etc.)

I, the undersigned, am the owner, their representative, or otherwise control the real property at the location described above. The Environmental Protection Agency (EPA) has requested entry and access to my property pursuant to its response and enforcement responsibilities under the Comprehensive Environmental Response, Compensation and Liability Act as amended (Superfund), 42 U.S.C. 9601 et seq.

I consent to officers, employees, and authorized representatives of the EPA, including their authorized contractors, entering and having continued access to my property for the following purposes:

1. Visually inspecting the property, including the interior and exterior of any home or any other structures on the property;
2. the taking of such soil, bulk, or dust samples as may be determined to be necessary;
3. the taking of actions to mark or temporarily cover exposed vermiculite.

This written permission is given by me voluntarily with knowledge of my right to refuse and without threats or promises of any kind. I certify that this Consent for Entry and Access is entered into voluntarily and constitutes an unconditional consent and grant of permission for access to the property by officers, employees, and authorized representatives of EPA at reasonable times.

7-20-02
Date

Scott Lindsey
Signature

EPA Information Center
Office Copy

LIBBY ASBESTOS PROJECT
Contaminant Screening Study

Primary Structure and Property Assessment Information Field Form

BD-001049

Field Logbook No.: 100076 Page No. 126 Site Visit Date: 7-20-22
 Address: 412 Palmerlee Ave Structure Description: H0-7
 Occupant: Scott Lindsay Phone Number: 293-7092
 Owner (if different than occupant): Duane Lindsay Phone Number: 293-7092
 Sampling Team: Mike Coffey and Duane Clegg
 Field Form Check Completed by (100% of forms): Regular Checked
 Screening Field Check Completed by (2% of forms):

Data Item	Value	Notes
HOUSE ATTRIBUTES		
Property Description	<input checked="" type="checkbox"/> Residential Industrial Commercial	
Surrounding Land Use	<input checked="" type="checkbox"/> Residential Industrial Commercial School Mining Other: _____	
Year of Construction	<u>~1980</u> Unknown	
Square Footage	<u>~2400</u>	
Construction Material	<input checked="" type="checkbox"/> Wood frame Masonry/Stone Other: _____	
Number of Floors Above Ground	<u>1</u> <u>2</u> <u>3</u> Other: _____	
Number of Rooms Per Floor Above Ground	1: <u>8</u> 2: _____ 3: _____ Other: _____	
Basement	<input checked="" type="checkbox"/> Yes No	
Heating Source	<input checked="" type="checkbox"/> Wood/Oak <input checked="" type="checkbox"/> Electric Propane/Gas Other: _____	
Heat Distribution	<input checked="" type="checkbox"/> Forced air <input checked="" type="checkbox"/> Radiant Other: _____	

CSS INFORMATION FIELD FORM (continued)

Address: 712 Palmer AveBD# 001049

Data Item	Value	Notes
OCCUPANT INFORMATION		
Number of Adults/Employees	0 1 2 <u>3</u> 4 5-15 16-20 21-30 >30	
Number of Children	<u>0</u> 1 2 3 4 Other: _____	
Years at Location	<1 1-5 5-10 10-15 <u>>15</u>	
Was the residence/building remodeled?	<input checked="" type="radio"/> Yes No	
	If yes: When (years): <u><2</u> 2-5 <u>>5</u> Where: Attic <u>Living Areas</u> Garage Basement Other: _____	
Has resident/business purchased any Libby vermiculite materials from W.R. Grace in the past?	<input checked="" type="radio"/> Yes No	
Has the property at this location been used for a for-profit enterprise of distributing, treating, storing, or disposing of Libby vermiculite?	<input checked="" type="radio"/> Yes No	
Are there any known areas of exposed vermiculite?	<input checked="" type="radio"/> Yes No	
	If yes: Where: Ceiling Walls Floors Attic Other: _____	

CSS INFORMATION FIELD FORM (continued)

Address: 70 Larch Ave
4/2

BD# 001049

Data Item	Value	Notes
INDOOR ASSESSMENT		
Vermiculite Insulation Past or Present	Attic: Yes <input checked="" type="radio"/> NA Unknown Walls: Yes <input checked="" type="radio"/> NA Unknown Basement: Yes <input checked="" type="radio"/> NA Unknown Crawl Space: Yes <input checked="" type="radio"/> No <input type="radio"/> NA Unknown Other: _____	Visual confirmation of current presence or absence required for attic.
Evidence of Physical Damage?	Yes <input checked="" type="radio"/>	
Evidence of Water Damage?	Yes <input checked="" type="radio"/>	
OUTDOOR ASSESSMENT		
Libby Amphibole Sources Present	Garden: Yes <input checked="" type="radio"/> No <input type="radio"/> NA Yard: Yes <input checked="" type="radio"/> No <input type="radio"/> NA Stockpiles: Yes <input checked="" type="radio"/> No <input type="radio"/> NA Other: _____	
Proximity to Other Properties with Potential Sources of Libby Amphiboles	Next door Within same block Other: _____ <u>Unknown</u>	

CSS INFORMATION FIELD FORM (continued)

Address: 412 Palmerston AveBD# SDYD89

Data Item	Value	Notes
EXPOSURE ASSESSMENT		
Type and Frequency of Activity Near Vermiculite Material - Indoor	<p>Frequency:</p> <ul style="list-style-type: none"> Once a day Once a week Once a month Once a year Not Applicable <p>Duration of Contact:</p> <ul style="list-style-type: none"> <1 hour 1-2 hours 2-4 hours >4 hours Not Applicable <p>Extent of Contact:</p> <ul style="list-style-type: none"> Heavy Moderate Light Not Applicable 	Not Applicable applies when no vermiculite is present on the property.
Type and Frequency of Activity Near Vermiculite Material - Outdoor	<p>Frequency:</p> <ul style="list-style-type: none"> Once a day Once a week Once a month Once a year Not Applicable <p>Duration of Contact:</p> <ul style="list-style-type: none"> <1 hour 1-2 hours 2-4 hours >4 hours Not Applicable <p>Extent of Contact:</p> <ul style="list-style-type: none"> Heavy Moderate Light Not Applicable 	<p>Not Applicable applies when no vermiculite is present on the property.</p> <p>vermiculite was is in garden but resident doesn't keep garden up anymore</p>

CSS INFORMATION FIELD FORM (continued)

Address: 412 Parrotter AveBD# 001049

Data Item	Value	Notes
CONTAMINANT SCREENING STUDY ASSESSMENT		
Occupant Information		
Is there any knowledge of former miners, close relative of miners, or any highly exposed persons living or visiting the property?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown <input type="radio"/>	
Is the resident, past or present, diagnosed with an asbestos related disease?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown <input type="radio"/>	
Indoor Information		
Does the interior have Zonolite attic insulation?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown <input type="radio"/>	
Did the interior ever have Zonolite attic insulation?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown <input type="radio"/>	NA applies if attic currently has ZAI.
Are there vermiculite additives in any of the building materials?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown <input type="radio"/>	
Outdoor Information		
Is there any evidence of primary source materials at or near the property?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown <input type="radio"/>	
Could this have been tracked indoors or otherwise spread outdoors on the property?	Yes <input type="radio"/> No <input checked="" type="radio"/> Unknown <input type="radio"/>	
Overall Assessment		
Are primary source materials present at the property?	Yes <input checked="" type="radio"/> No <input type="radio"/>	
Where are primary source materials located?	Inside <input type="radio"/> Outside <input checked="" type="radio"/> Both <input type="radio"/> NA <input type="radio"/>	<u>garden</u>
ADDITIONAL INFORMATION		
<hr/> <hr/> <hr/> <hr/>		

CSS INFORMATION FIELD FORM (continued)

Address: 412 Parrotel Ave

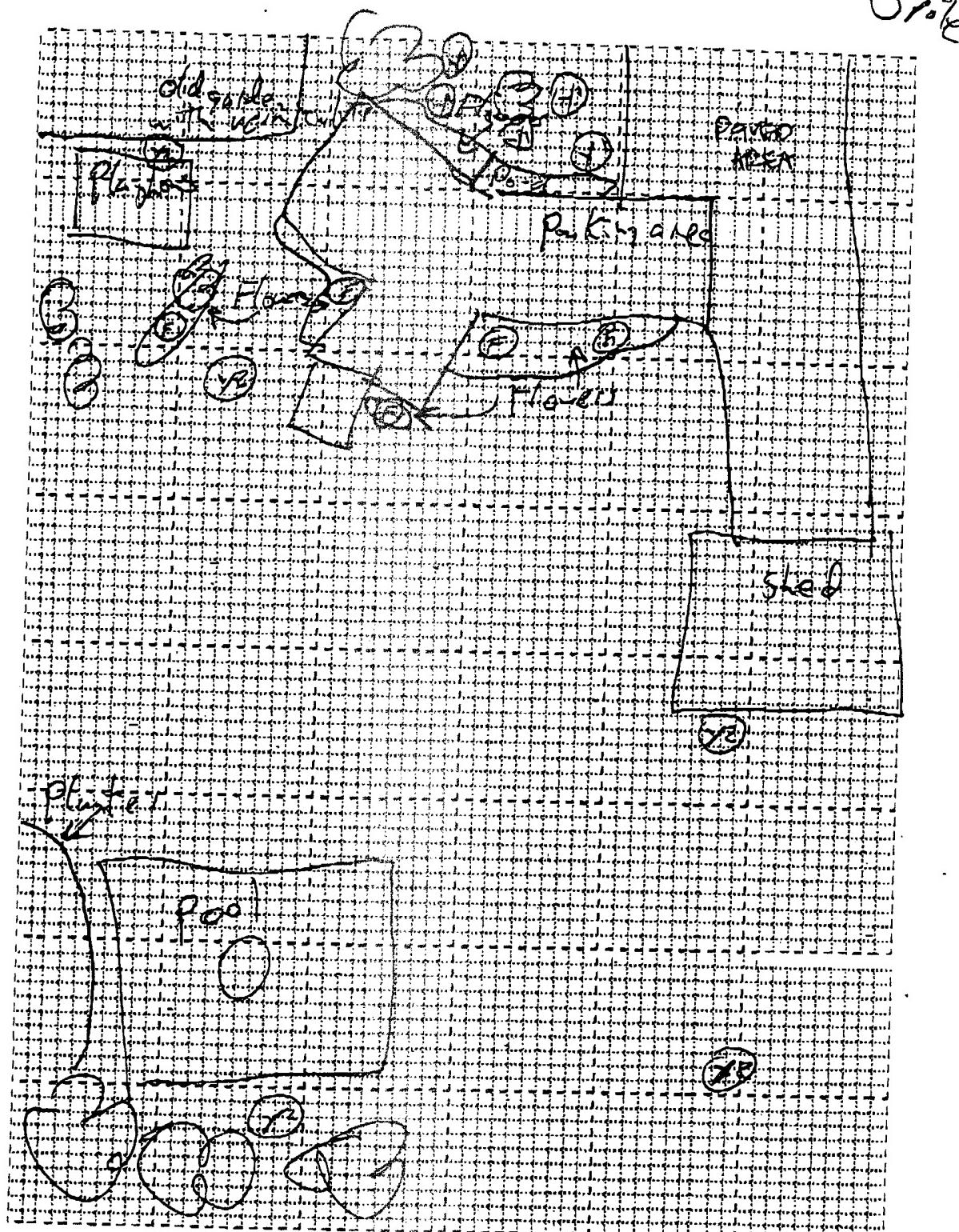
BD# 500049

FIELD DIAGRAM OF PROPERTY

FIELD DIAGRAM OF PROPERTY

Identify important features (i.e. drainage, trees, gardens, structures, flowerbeds, utility poles, known underground utilities, suspected Libby amphibole source areas, sample locations, etc).

NOT TO SCALE



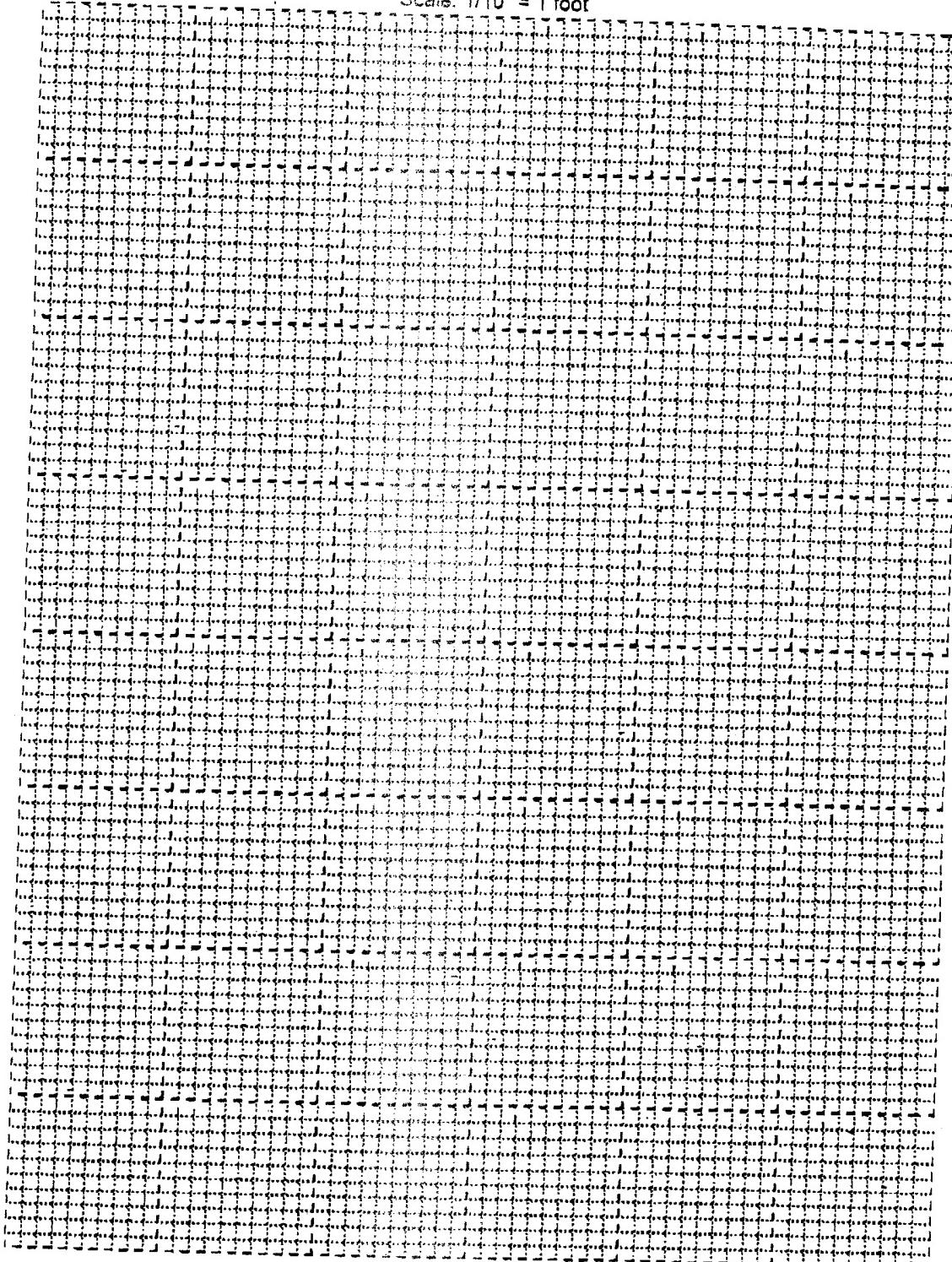
CSS INFORMATION FIELD FORM (continued)

Address: 412 Painefer AveBD# 001049

FIELD DIAGRAM OF PRIMARY STRUCTURE

Floor of House (circle): First Second Third Basement Include approximate dimensions of rooms and floor covering type. Use more than one diagram if needed. Completed
only if ZAI is present.

Scale: 1/10" = 1 foot

Page 2 of 2

Lindsey, Duane + Donatt
1126 Parmenter Ave
Location: 412 Parmenter Ave Date: 07-20-02
Project / Client: ~~Wally Asbestos / EPA VOTE~~

11400 arrived at residence. Owners son signed consent form. One floor basement. Shed is insulated. Owner stated may be in garden. There is vermiculite. COM verified vermiculite present in garden. No visible vermiculite was observed inside house. Attic of house has fiberglass. Shed has fiberglass insulation in attic as well.

57-20-02
RC

Sheet No.: CSS (S) - 0010078

CONTAMINANT SCREENING STUDY
FIELD SAMPLE DATA SHEET FOR SOIL

Scenario No.: N/A Field Logbook No: 100083 Page No: 108 Sampling Date: 7/24/02Address: 412 Parmenter Ave Owner: Scott Lindsey

Business Name: _____

Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM PES Other _____ Names: Walt, Shelly, Brian, H-H's

Data Item	Sample 1	Sample 2	Sample 3
Index ID	<u>CS- 02801</u>	<u>CS- 02802</u>	<u>CS- 02803</u>
Location ID	<u>SP- 113290</u>	<u>SP- 113291</u>	<u>SP- 113292</u>
Sample Group	<u>Yard</u>	<u>Yard</u>	<u>Flower beds</u>
Location Description (circle)	<u>Back yard</u> <u>Front yard</u> <u>Side yard</u> Other _____	<u>Back yard</u> <u>Front yard</u> <u>Side yard</u> Other _____	<u>Back yard</u> <u>Front yard</u> <u>Side yard</u> Other _____
Category (circle)	<u>FS</u> <u>FD of</u> Field Blank (lot or equipment)	<u>FS</u> <u>FD of</u> Field Blank (lot or equipment)	<u>FS</u> <u>FD of</u> Field Blank (lot or equipment)
Matrix Type (Surface soil unless otherwise noted)	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____	<u>Surface Soil</u> Other _____
Type (circle)	<u>Grab</u> <u>Comp. # subsamples</u>	<u>Grab</u> <u>Comp. # subsamples</u>	<u>Grab</u> <u>Comp. # subsamples</u>
Sample Time	<u>1440</u>	<u>1450</u>	<u>1500</u>
Top Depth (in.)	<u>0</u>	<u>0</u>	<u>0</u>
Bottom Depth (in.)	<u>1</u>	<u>1</u>	<u>6</u>
Grid, Quadrant, Section	<u>—</u>	<u>—</u>	<u>—</u>
Field Comments	<u>BD 100 001D49 7/24/02</u>	Vermiculite seen in the back yard in area adjacent to the old garden.	<u>7/24/02</u>
	Entered _____ Validated _____	Entered _____ Validated _____	Entered _____ Validated _____

Field Team	Initial
Completed by	<u>BAH</u>
QC by	<u>WS</u>

Sheet No.: CSS (S) - 001079

CONTAMINANT SCREENING STUDY
FIELD SAMPLE DATA SHEET FOR SOIL

Scenario No.: 111 Field Logbook No: 100083 Page No: 128 Sampling Date: 7/24/02Address: 412 Parmenter Ave Owner: Duane E. Donna Job 7/25/02Business Name: -Land Use: (circle) Residential School Commercial Mining Roadway Other ()Sampling Team: (circle) CDM PES Other _____ Names: Walter Smith; Brian Hiltz

Data Item	Sample 1	Sample 2	Sample 3
Index ID	<u>CS- 02804</u>		
Location ID	<u>SP- 113292</u>		
Sample Group	<u>Flower beds Duplicate</u>		
Location Description (circle)	<u>Back yard</u> <u>Front yard</u> <u>Side yard</u> Other _____	<u>Back yard</u> <u>Front yard</u> <u>Side yard</u> Other _____	<u>Back yard</u> <u>Front yard</u> <u>Side yard</u> Other _____
Category (circle)	<u>FS</u> <u>FD of CS-02803</u> Field Blank (lot or equipment)	<u>FS</u> <u>FD of</u> Field Blank (lot or equipment)	<u>FS</u> <u>FD of</u> Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	<u>Surface Soil</u> Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab <u>Comp. # subsamples 5</u>	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	<u>1500</u>		
Top Depth (in.)	<u>0</u>		
Bottom Depth (in.)	<u>6</u>		
Grid, Quadrant, Section	<u>-</u>		
Field Comments	<u>BD- 001049</u>		
	Entered ____ Validated ____	Entered ____ Validated ____	Entered ____ Validated ____

Field Team	Initial
Completed by	<u>BAT</u>
QC by	<u>WS</u>

108

Location 412 Permenter Ave Date 7/24/02Project / Client Libby Asbestos - Volpe EPA Region 8

Scott Lindsey BD-001049

1435 Arrive @ 412 Permenter Ave. Walk property and decide to sample the front yard, back yard, flower beds and old flower bed duplicate Vermiculite was seen in the old garden in the back yard. Walter Smith is collecting samples in modified level D PPE. All sampling areas are sprayed with water before collecting samples.

Front
YardCS- 02801 ~~BAK~~ ~~7/24/02~~ SP- 113290

1440 Field Data Sheet 001278 LOC 003011

Back
YardCS- 02802 ~~BAK~~ ~~7/24/02~~ SP- 113291

1450 Field Data Sheet 001278 LOC 003011

Flower
bedCS- 02803 ~~BAK~~ ~~7/24/02~~ SP- 113292

1500 Field Data Sheet 001278 LOC 003011

Flower bed
DuplicateCS- 02804 ~~BAK~~ ~~7/24/02~~ SP- 113292

1500 Field Data Sheet 001279 LOC 003011

Vermiculite was noticed in back yard adjacent to the old garden. Photo was taken of the old garden at back yard. [GPS File T3E07242]

~~BAK~~
~~7/24/02~~
B-2125 7/24/02

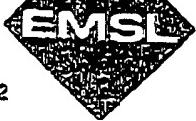
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EMSL ANALYTICAL

PAGE 04/05

USEPA REGION 8 LIBBY SITE INVESTIGATION v24a
TEM Asbestos Structure Count - ISO 10312

Version 24a

**SAMPLE ID**

Status	Analyzed	PARAMETERS
EPA Sample Number	1D-00519	Effective filter area
QA Type	Not QA	Indirect factor
Lab Sample Number	270300706-0005	Number of Grid Openings (amphibole)
Sample Type	Dust	Number of Grid Openings (chrysotile)
Category	Field	Grid opening area
Prep	Indirect	Volume (L) or Area (cm ²)
Counting Rules	10312	Sensitivity (amphibole)
		Sensitivity (chrysotile)

1295.0 mm²
2.50E-01
10
10
0.0059 mm²
300 cm²
2.93E+02 s/cm²
2.93E+02 s/cm²

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	0	0	0		
b	0	0	0		
c	0	0	0		
d	0	0	0		
e	0	0	0		
f	0	0	0		
Total	0	0	0	0	0
Check	OK	OK	OK		
Grand total	0	OK			

LOADING (s/cm²)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	<DL	<DL	<DL		
b	<DL	<DL	<DL		
c	<DL	<DL	<DL		
d	<DL	<DL	<DL		
e	<DL	<DL	<DL		
f	<DL	<DL	<DL		
Total	<DL	<DL	<DL	<DL	<DL

RISK (air only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factors

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (μm)	5-10	>10	5-10	>10
Unit Risk (t/cc)-1	5.74E-02	1.89E+01	2.20E-03	6.98E-01

IRIS (PCME)

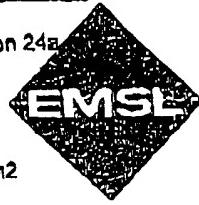
Unit Risk (t/cc)-1	0.23
--------------------	------

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphiboles	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to <.5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

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USEPA REGION 8 LIBBY SITE INVESTIGATION v24a
TEM Asbestos Structure Count - ISO 10312

Version 24a



SAMPLE ID
 Status Analyzed
 EPA Sample Number 1D-00520
 QA Type Not QA
 Lab Sample Number 270300706-0006
 Sample Type Dust
 Category Field
 Prep Indirect
 Counting Rules 10312

PARAMETERS

Effective filter area	1295.0 mm ²
Indirect factor	2.50E-01
Number of Grid Openings (amphibole)	10
Number of Grid Openings (chrysotile)	10
Grid opening area	0.0069 mm ²
Volume (L) or Area (cm ²)	300 cm ²
Sensitivity (amphibole)	2.93E+02 s/cm ²
Sensitivity (chrysotile)	2.93E+02 s/cm ²

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	0	0	0		
b	0	0	0		
c	0	0	0		
d	0	0	0		
e	0	0	0		
f	0	0	0		
Total	0	0	0	0	0
Check	OK	OK	OK		
Grand total	0	0	0		

LOADING (s/cm²)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	<DL	<DL	<DL		
b	<DL	<DL	<DL		
c	<DL	<DL	<DL		
d	<DL	<DL	<DL		
e	<DL	<DL	<DL		
f	<DL	<DL	<DL		
Total	<DL	<DL	<DL	<DL	<DL

RISK (air only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e				-	
f					
Total					

Toxicity factors

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
	length (um)	Unit Risk (/cc)-1	length (um)	Unit Risk (/cc)-1
length (um)	5-10	5.74E-02	>10	1.89E+01
Unit Risk (/cc)-1	5-10	5.74E-02	>10	6.86E-01

IRIS (PCME)

Unit Risk (/cc)-1	0.23
-------------------	------

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>=5
C = Chrysotile	c		>.5	>>5
	d	>=.5 to <5	<=.5	>>5
	e	5 to 10	<=.5	>>5
	f	>10	<=.5	>>5

USEPA REGION 8 LIBBY SITE INVESTIGATION v24a
 TEM Asbestos Structure Count - ISO 10312

Version 24a



SAMPLE ID

Status Analyzed
 EPA Sample Number 1D-00461
 QA Type Not QA
 Lab Sample Number 270300706-0001
 Sample Type Dust
 Category Field
 Prep Indirect
 Counting Rules 10312

PARAMETERS

Effective filter area 1296.0 mm²
 Indirect factor 1.00E-01
 Number of Grid Openings (amphibole) 10
 Number of Grid Openings (chrysotile) 10
 Grid opening area 0.0059 mm²
 Volume (L) or Area (cm²) 300 cm²
 Sensitivity (amphibole) 7.32E+02 s/cm²
 Sensitivity (chrysotile) 7.32E+02 s/cm²

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	0	0	0		
b	0	0	0		
c	0	0	0		
d	0	0	0		
e	0	0	0		
f	0	0	0		
Total	0	0	0	0	0
Check	OK	OK	OK		
Grand total	0	OK			

Lindsay
 412 Parmenter Ave
 Shed GF
 HS/HTW

LOADING (s/cm²)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	<DL	<DL	<DL		
b	<DL	<DL	<DL		
c	<DL	<DL	<DL		
d	<DL	<DL	<DL		
e	<DL	<DL	<DL		
f	<DL	<DL	<DL		
Total	<DL	<DL	<DL	<DL	<DL

RISK (air only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factors

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (/cc)-1	5.74E-02	1.89E-01	2.20E-03	6.88E-01

IRIS (PCME)

Unit Risk (/cc)-1	0.23
-------------------	------

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>=5
C = Chrysotile	c		>.5	>=5
	d	>=.5 to <5	<=.5	>=5
	e	5 to 10	<=.5	>=5
	f	>10	<=.5	>=5

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EMSL ANALYTICAL

USEPA REGION 8 LIBBY SITE INVESTIGATION v24a
TEM Asbestos Structure Count - ISO 10312

Version 24a

EMSL**SAMPLE ID**

Status Analyzed
 EPA Sample Number 1D-00462
 QA Type Not QA
 Lab Sample Number 270300706-0002
 Sample Type Dust
 Category Field
 Prep Indirect
 Counting Rules 10312

PARAMETERS

Effective filter area 1295.0 mm²
 Indirect factor 1.00E-01
 Number of Grid Openings (amphibole) 10
 Number of Grid Openings (chrysotile) 10
 Grid opening area 0.0059 mm²
 Volume (L) or Area (cm²) 300 cm²
 Sensitivity (amphibole) 7.32E+02 s/cm²
 Sensitivity (chrysotile) 7.32E+02 s/cm²

COUNTS (based on countable structures only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	0	0	0		
b	0	0	0		
c	0	0	0		
d	0	0	0		
e	0	0	0		
f	0	0	0		
Total	0	0	0	0	0
Check	OK	OK	OK		
Grand total	0	OK			

Lindsay
 412 Carpenter Ave
 Chicken coop
 GF HS/HTW

LOADING (s/cm²)

Class	LA	OA	C	PCME(all)	PCME(asb)
a	<DL	<DL	<DL		
b	<DL	<DL	<DL		
c	<DL	<DL	<DL		
d	<DL	<DL	<DL		
e	<DL	<DL	<DL		
f	<DL	<DL	<DL		
Total	<DL	<DL	<DL	<DL	<DL

RISK (air only)

Class	LA	OA	C	PCME(all)	PCME(asb)
a					
b					
c					
d					
e					
f					
Total					

Toxicity factors

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
	length (um)	width (um)	length (um)	width (um)
length (um)	5-10	>10	5-10	>10
Unit Risk (/cc)-1	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (/cc)-1	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5